NRCS Natural Resources Conservation Service

Utah Water Supply Outlook Report

February 1, 2006

Lightning Ridge SNOTEL site, near Causey Reservoir, Jan 31, 2006.
Photo by Randy Julander, NRCS, USDA .

Water Supply Outlook Reports
and Federal - State - Private Cooperative Snow Surveys

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How forecasts are made

Most of the annual streamflow in the western United States originates as snowfall that has accumulated in the mountains during the winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Measurements of snow water equivalent at selected manual snowcourses and automated SNOTEL sites, along with precipitation, antecedent streamflow, and indices of the El Niño / Southern Oscillation are used in computerized statistical and simulation models to prepare runoff forecasts. These forecasts are coordinated between hydrologists in the Natural Resources Conservation Service and the National Weather Service. Unless otherwise specified, all forecasts are for flows that would occur naturally without any upstream influences.

Forecasts of any kind, of course, are not perfect. Streamflow forecast uncertainty arises from three primary sources: (1) uncertain knowledge of future weather conditions, (2) uncertainty in the forecasting procedure, and (3) errors in the data. The forecast, therefore, must be interpreted not as a single value but rather as a range of values with specific probabilities of occurrence. The middle of the range is expressed by the 50% exceedance probability forecast, for which there is a 50% chance that the actual flow will be above, and a 50% chance that the actual flow will be below, this value. To describe the expected range around this 50% value, four other forecasts are provided, two smaller values (90% and 70% exceedance probability) and two larger values (30%, and 10% exceedance probability). For example, there is a 90% chance that the actual flow will be more than the 90% exceedance probability forecast. The others can be interpreted similarly.

The wider the spread among these values, the more uncertain the forecast. As the season progresses, forecasts become more accurate, primarily because a greater portion of the future weather conditions become known; this is reflected by a narrowing of the range around the 50% exceedance probability forecast. Users should take this uncertainty into consideration when making operational decisions by selecting forecasts corresponding to the level of risk they are willing to assume about the amount of water to be expected. If users anticipate receiving a lesser supply of water, or if they wish to increase their chances of having an adequate supply of water for their operations, they may want to base their decisions on the 90% or 70% exceedance probability forecasts, or something in between. On the other hand, if users are concerned about receiving too much water (for example, threat of flooding), they may want to base their decisions on the 30% or 10% exceedance probability forecasts, or something in between. Regardless of the forecast value users choose for operations, they should be prepared to deal with either more or less water. (Users should remember that even if the 90% exceedance probability forecast is used, there is still a 10% chance of receiving less than this amount.) By using the exceedance probability information, users can easily determine the chances of receiving more or less water.

STATE OF UTAH GENERAL OUTLOOK
Feb 1, 2006

SUMMARY
January was a continuation of the weather patterns that favored northern Utah and brought at least a little more precipitation and snowpack to the southern areas. In northern Utah, the January snow accumulations were 123% to 144% of the normal monthly totals, by all accounts, a fantastic month. Snowpacks now range from 111% of average over the Uintah Basin to 142% on the Bear River. Looking ahead to April 1 of this year, given the current snowpack, the Bear River Watershed has a 91% probability of at least average snowpack this year. That is to say, it would take the worst possible climatic scenario to snatch defeat from the jaws of victory at this point. With just a couple more good storms, the Bear will be at its average April 1 value and everything that comes thereafter will put it further into the bonus area. Other watersheds in northern Utah also have above average probabilities of getting at least average snowpacks or above this season: Weber - 94%, Provo - 80% and the Uintah's 66%. Down south, the outlook is not nearly as rosy with probabilities ranging from a low of 26% in southwest Utah to a high of only 51% in southeast Utah. It is more likely that these areas will have a poor runoff year - pretty much feast or famine when comparing this year to last year. Soil moisture values in water producing areas has been interesting, normally they start to slowly increase this time of year and in northern Utah, that is what we see, but in southern Utah from the Sevier River Basin south, soil moisture values are declining. Soil moisture values are significantly less (10% to 45%) than last year across the state, with southern Utah experiencing the greatest declines. This could have a significant impact on spring runoff, particularly in the south. Overall, soil moisture values range from 10% to 56% of saturation in the upper 24 inches of soil. The mild temperatures that have occurred over most of this winter have impacted lower elevation snowpacks. Lower elevation snowpacks in southern Utah range from 0% to about 30% of average. Precipitation for January was much above normal at 134%. This brings the seasonal precipitation, (Oct-Jan) to 115%. Low reservoir storage is becoming less of a concern with total reservoir storage at 67% of capacity, up 25% from last year. The area of greatest drought concern is the Bear River with current reservoir storage at only 24% of capacity and the emerging drought conditions in southern and southeastern Utah. In general, most areas of the state have excellent reservoir carryover. General water supply conditions are near average and have been improving over the past year with the exception of southern Utah. Streamflow forecasts range from 10% to 162% of average. Surface Water Supply Indices range from 21% on the Bear River, to 84% on the Provo.

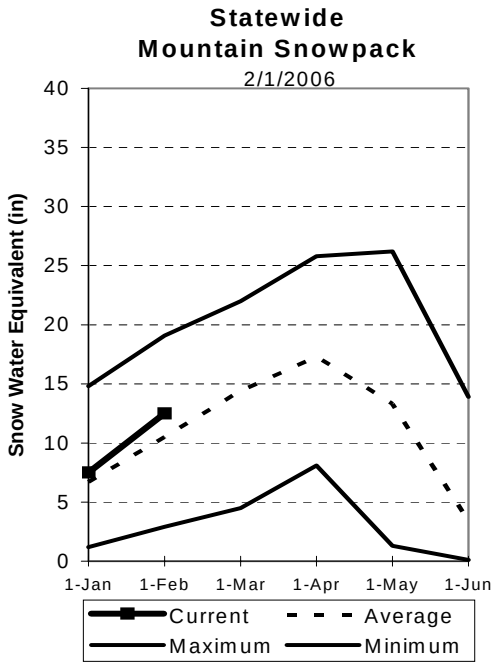
SNOWPACK
January first snowpacks as measured by the NRCS SNOTEL system range from 54% in southwest Utah to 142% on the Bear River Watershed, a complete reversal of last year. Northern snowpacks are similar or in the case of the Bear, higher than last year. Low elevation snowpacks are below normal pretty much statewide. While there are still 2 months of winter yet to come and any outcome is still possible, this should be an excellent water supply year in the north and appears to be relatively poor in the south.

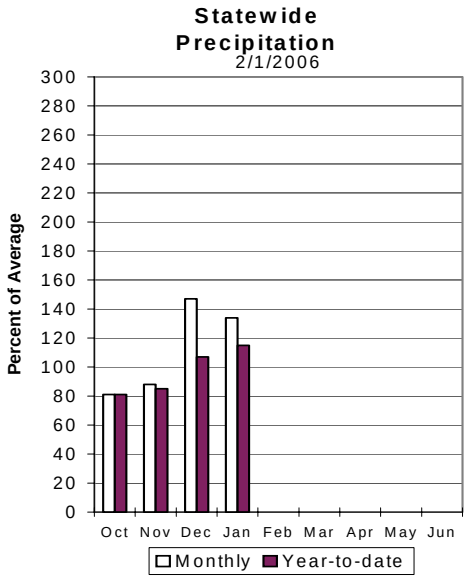
PRECIPITATION
Mountain precipitation during January was 134% of average statewide. Precipitation was lower in southern Utah (88%) and much higher in the north (157%). This brings the seasonal accumulation (Oct-Jan) to 115% of average statewide. A dry fall and early winter has reduced soil moisture values considerably and this could negatively impact spring runoff.

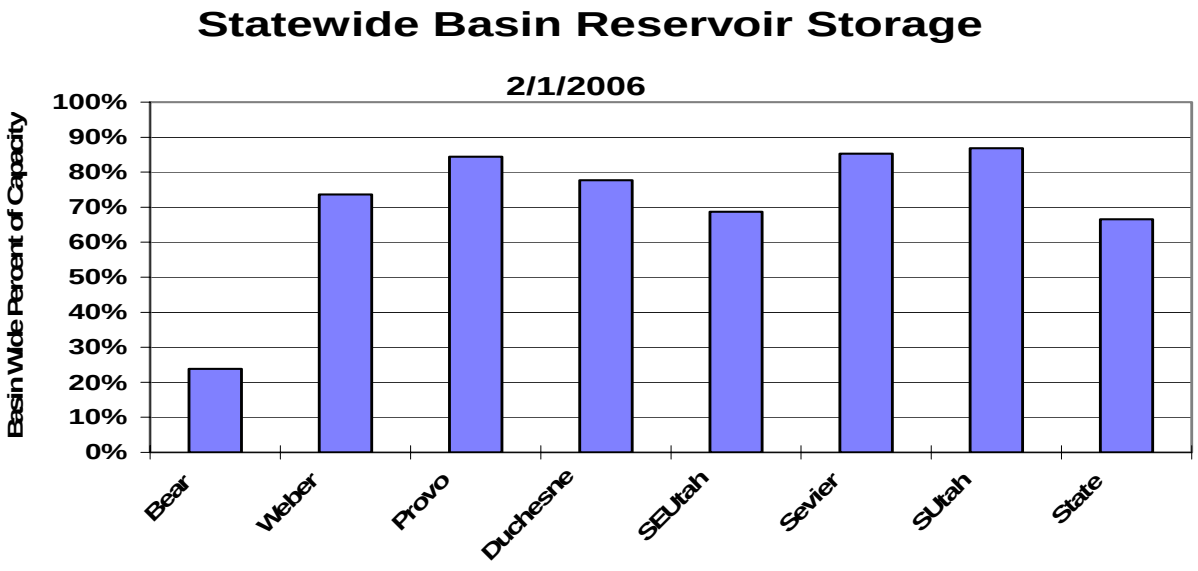
RESERVOIRS
Storage in 41 of Utah’s key irrigation reservoirs is at 67% of capacity. This is an increase of 25% from last year. Reservoirs across the State have been making steady gains in storage. Bear Lake really is the last reservoir to remain in an extremely low condition due to the prolonged drought.

STREAMFLOW

Snowmelt streamflows are expected to be much below average to much above average across the state of Utah this year. Forecast streamflows range from 10% on Recapture Creek near Blanding to 162% of average for Wheeler Creek on the Ogden Basin. Most flows are forecast to be in the 60% to 130% range. Overall water supply conditions are improving in the north and declining in the south.

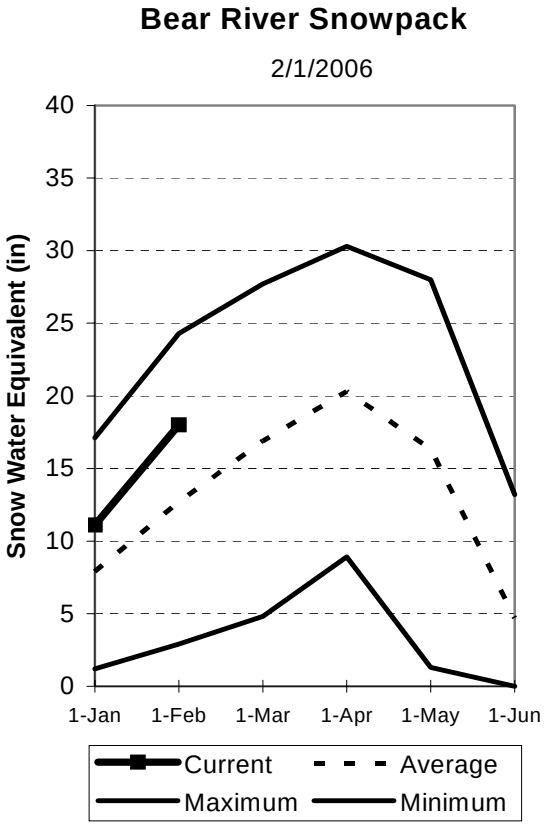


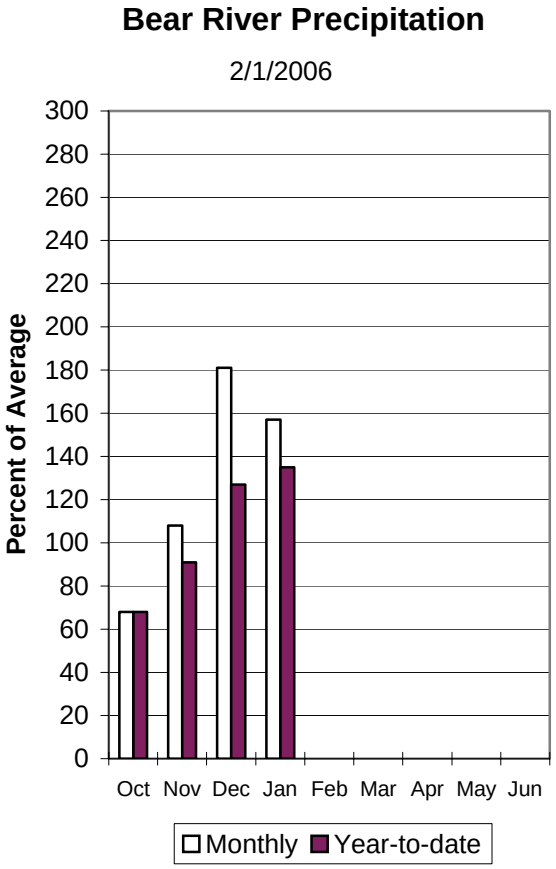


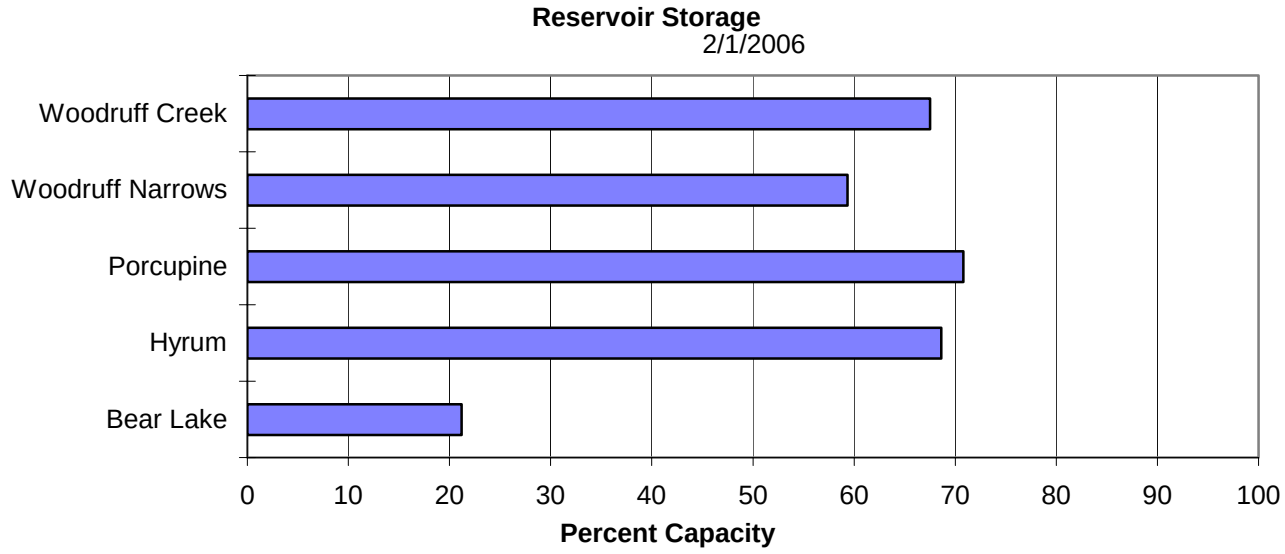


Bear River Basin
Feb 1, 2006

Snowpacks on the Bear River Basin are much above average at 142% of normal, about 129% of last year and up 1% relative to last month. This is the best snowpack on the Bear since 1997! Specific sites range from 123% to 196% of normal. January precipitation was much above average at 157%, which brings the seasonal accumulation (Oct-Jan) to 135% of average. Soil moisture levels in runoff producing areas are at 56% of saturation in the upper 2 feet of soil compared to 67% last year. Forecast streamflows range from near to much above average (120%-145%) volumes this spring. Reservoir storage is extremely low at 24% of capacity, 22% more than last year. The Surface Water Supply Index is at 21% for the Bear River, or 79% of years have had more total water available. Water supply conditions are much below normal due to low reservoir storage but improved significantly over last few years.







BEAR RIVER BASIN
Streamflow Forecasts - February 1, 2006

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Bear River nr UT-WY State Line	APR-JUL	101	121	135	120	149	169	113
Bear River ab Reservoir nr Woodruff	APR-JUL	115	147	169	124	191	223	136
Big Creek nr Randolph	APR-JUL	5.2	6.3	7.1	145	7.9	9.0	4.9
Smiths Fork nr Border	APR-JUL	111	129	141	137	153	171	103
Bear River at Stewart Dam	APR-JUL	208	269	315	135	365	445	234
Little Bear River at Paradise	APR-JUL	35	48	58	126	69	86	46
Logan R Abv State Dam Nr Logan	APR-JUL	126	154	175	139	197	233	126
Blacksmith Fk Abv Up&L Dam Nr Hyrum	APR-JUL	44	58	69	144	81	100	48

BEAR RIVER BASIN
Reservoir Storage (1000 AF) - End of January

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
BEAR LAKE	1302.0	276.0	0.0	---
HYRUM	15.3	10.5	10.4	10.4
PORCUPINE	11.3	9.0	7.0	4.4
WOODRUFF NARROWS	57.3	34.0	14.0	25.2
WOODRUFF CREEK	4.0	2.7	1.7	---

BEAR RIVER BASIN
Watershed Snowpack Analysis - February 1, 2006

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
BEAR RIVER, UPPER (abv Ha	6	113	136
BEAR RIVER, LOWER (blw Ha	8	139	146
LOGAN RIVER	4	132	152
RAFT RIVER	1	231	196
BEAR RIVER BASIN	14	129	142

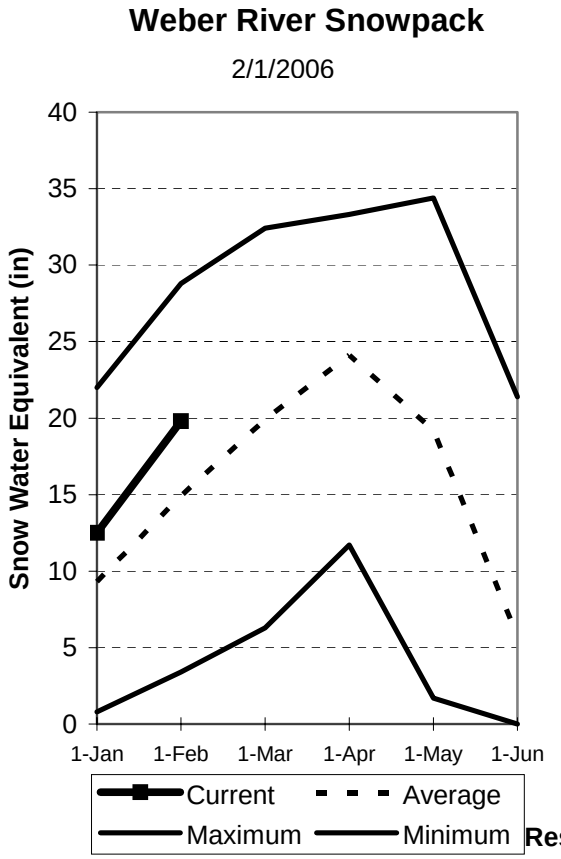
* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

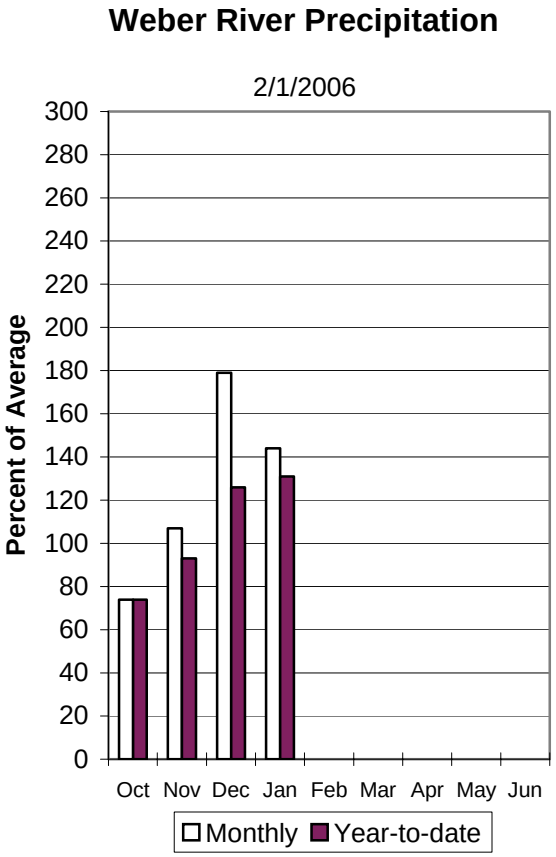
The average is computed for the 1971-2000 base period.

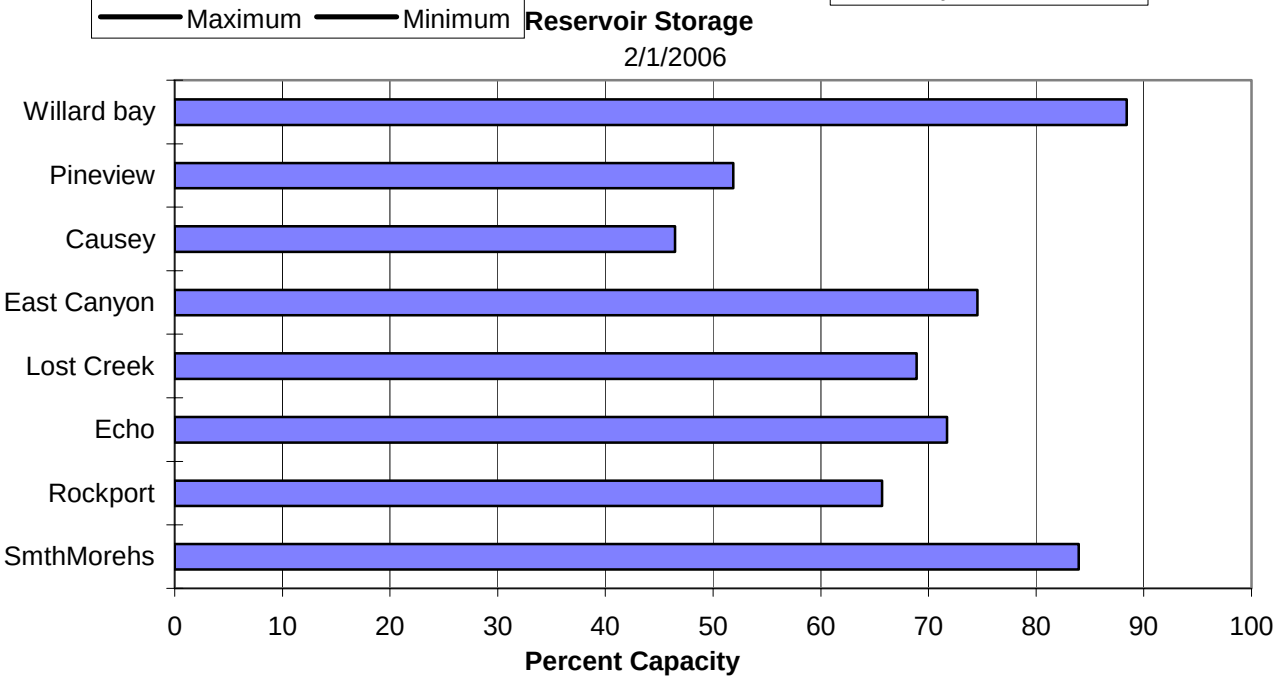
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

Weber and Ogden River Basins
Feb 1, 2006

Snowpack on the Weber and Ogden Watersheds is much above normal at 133%, about 103% of last year. Individual sites range from 104% to 180% of average. January precipitation was much above average at 144% bringing the seasonal accumulation (Oct-Jan) to 131% of average. Soil moisture levels in runoff producing areas are at 55% of saturation in the upper 2 feet of soil compared to 68% last year. Streamflow forecasts range from 120% to 162% of average. Reservoir storage is at 74% of capacity, about 25% more than last year. The Surface Water Supply Index is at 90% for the Weber River and at 83% for the Ogden River. Overall water supply conditions are near to above normal and improving.







WEBER & OGDEN WATERSHEDS in Utah
Streamflow Forecasts - February 1, 2006

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Smith & Morehouse Res inflow	APR-JUL	32	37	41	121	45	50	34
Weber River nr Oakley	APR-JUL	120	139	152	124	165	184	123
Rockport Resv Inflow Nr Wanship	APR-JUL	131	156	173	129	190	215	134
Weber River nr Coalville	APR-JUL	135	161	179	131	197	223	137
Chalk Creek at Coalville	APR-JUL	35	46	54	120	62	73	45
Echo Reservoir inflow	APR-JUL	177	212	235	131	257	292	179
Lost Creek Reservoir inflow	APR-JUL	14.1	19.7	24	136	29	37	17.6
East Canyon Reservoir inflow	APR-JUL	37	44	50	161	56	65	31
Weber River at Gateway	APR-JUL	425	495	540	152	585	655	355
SF Ogden River nr Huntsville	APR-JUL	59	74	84	131	94	109	64
Pineview Reservoir inflow	APR-JUL	121	151	171	129	191	221	133
Wheeler Creek nr Huntsville	APR-JUL	7.5	9.1	10.2	162	11.3	12.9	6.3

WEBER & OGDEN WATERSHEDS in Utah
Reservoir Storage (1000 AF) - End of January

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
CAUSEY	7.1	3.3	3.5	2.8
EAST CANYON	49.5	36.9	34.2	35.4
ECHO	73.9	53.0	40.1	50.2
LOST CREEK	22.5	15.5	5.5	14.0
PINEVIEW	110.1	57.1	66.4	51.7
ROCKPORT	60.9	40.0	42.1	34.3
WILLARD BAY	215.0	190.1	72.6	151.6

WEBER & OGDEN WATERSHEDS in Utah
Watershed Snowpack Analysis - February 1, 2006

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
OGDEN RIVER	4	108	123
WEBER RIVER	9	105	138
WEBER & OGDEN WATERSHEDS	13	106	133

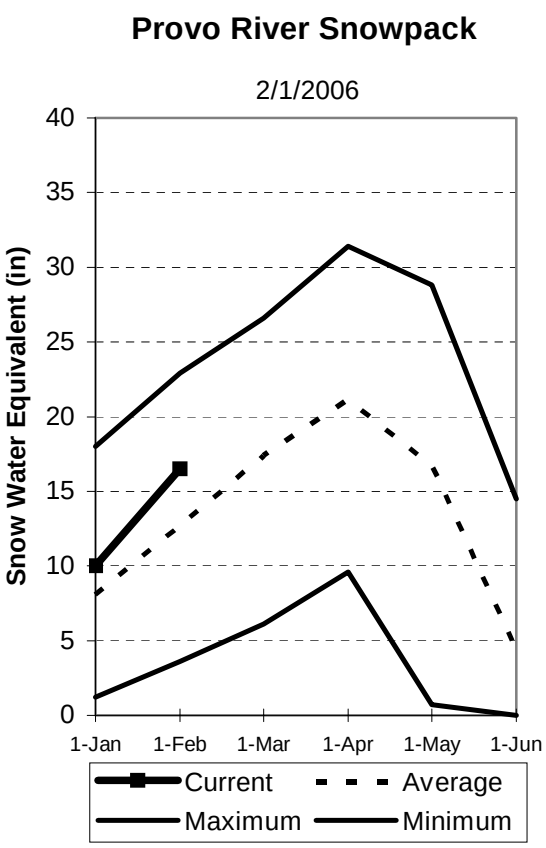
* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

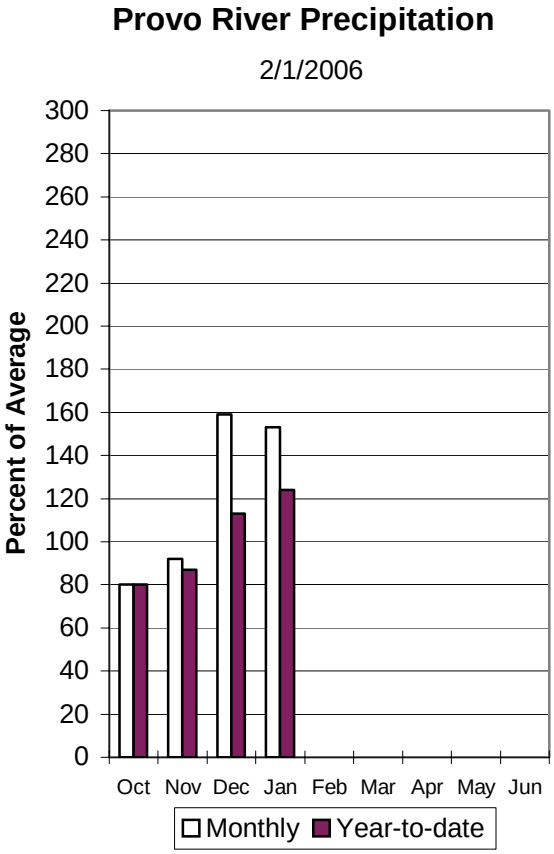
The average is computed for the 1971-2000 base period.

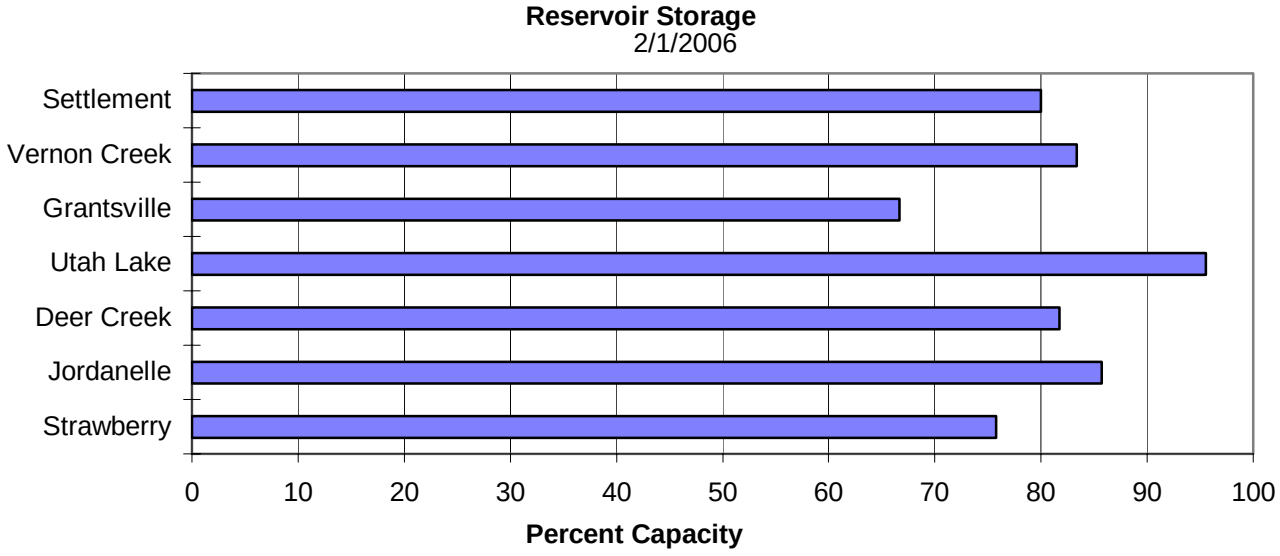
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

Utah Lake, Jordan River & Tooele Valley Basins
Feb 1, 2006

Snowpacks over these watersheds are above average at 130%, 95% of last year. Individual sites range from 78% to 169% of average. January precipitation was much above average at 153%, bringing the seasonal accumulation (Oct-Dec) to 124% of average. Soil moisture levels in runoff producing areas are at 44% of saturation in the upper 2 feet of soil compared to 75% last year. Forecast streamflows range from 83% to 141% of average. Reservoir storage is at 84% of capacity, 23% more than last year. The Surface Water Supply Index is at 88%, or only 12% of years would have more total water available. General water supply conditions are near normal and improving.







UTAH LAKE, JORDAN RIVER & TOOELE VALLEY
Streamflow Forecasts - February 1, 2006

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Spanish Fork River nr Castilla	APR-JUL	45	71	95	123	119	145	77
Provo River nr Woodland	APR-JUL	96	116	129	125	142	162	103
Provo River nr Hailstone	APR-JUL	98	124	140	128	156	182	109
Deer Creek Resv Inflow	APR-JUL	96	134	160	127	186	225	126
American Fk Abv Upper Powerplant	APR-JUL	34	41	45	141	49	56	32
Utah Lake inflow	APR-JUL	240	339	410	126	481	580	325
Little Cottonwood Ck nr SLC	APR-JUL	40	46	50	125	54	61	40
Big Cottonwood Ck nr SLC	APR-JUL	38	46	50	132	54	62	38
Mill Creek nr SLC	APR-JUL	4.9	6.7	7.9	113	9.1	10.9	7.0
Parley's Creek nr SLC	APR-JUL	11.0	16.2	20	120	24	29	16.7
Dell Fork nr SLC	APR-JUL	4.0	6.5	8.1	119	9.7	12.2	6.8
Emigration Creek nr SLC	APR-JUL	1.7	3.6	5.0	111	6.4	8.3	4.5
City Creek nr SLC	APR-JUL	5.3	7.8	9.5	109	11.2	13.7	8.7
Vernon Creek nr Vernon	APR-JUL	0.7	1.0	1.2	84	1.6	2.3	1.5
Settlement Creek Abv Resv Nr Tooele	APR-JUL	0.4	1.0	1.5	83	2.1	3.1	1.8
South Willow Creek nr Grantsville	APR-JUL	2.1	3.1	3.7	115	4.3	5.3	3.2

UTAH LAKE, JORDAN RIVER & TOOELE VALLEY
Reservoir Storage (1000 AF) - End of January

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
DEER CREEK	149.7	122.4	110.8	104.8
GRANTSVILLE	3.3	2.2	1.9	1.8
SETTLEMENT CREEK	1.0	0.8	0.7	0.6
STRAWBERRY-ENLARGED	1105.9	837.6	729.1	642.2
UTAH LAKE	870.9	832.0	458.0	790.9
VERNON CREEK	0.6	0.5	0.6	---

UTAH LAKE, JORDAN RIVER & TOOELE VALLEY
Watershed Snowpack Analysis - February 1, 2006

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
PROVO RIVER & UTAH LAKE	7	95	124
PROVO RIVER	4	97	136
JORDAN RIVER & GREAT SALT	6	107	143
TOOELE VALLEY WATERSHEDS	3	76	108
UTAH LAKE, JORDAN RIVER &	16	98	130

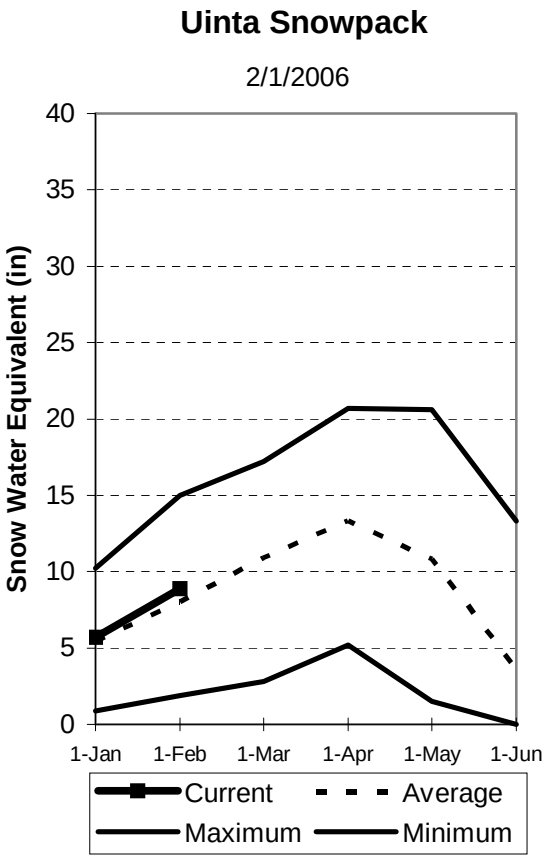
* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

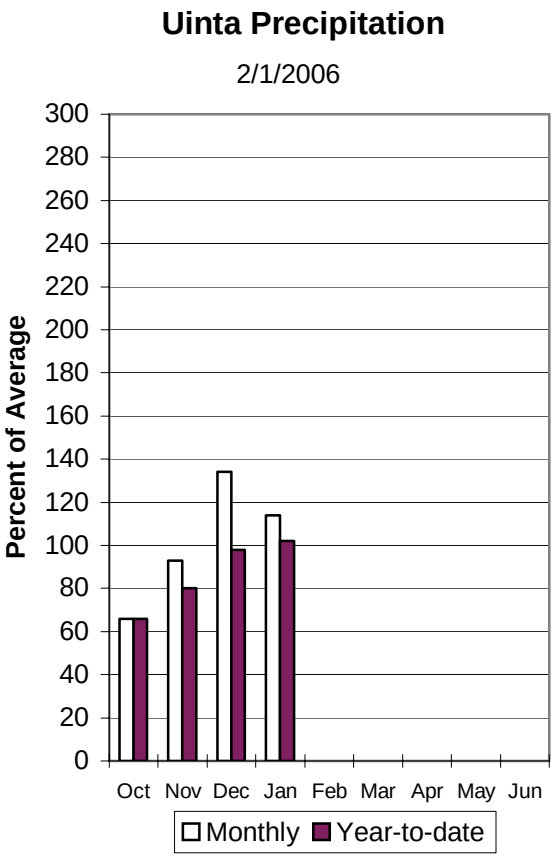
The average is computed for the 1971-2000 base period.

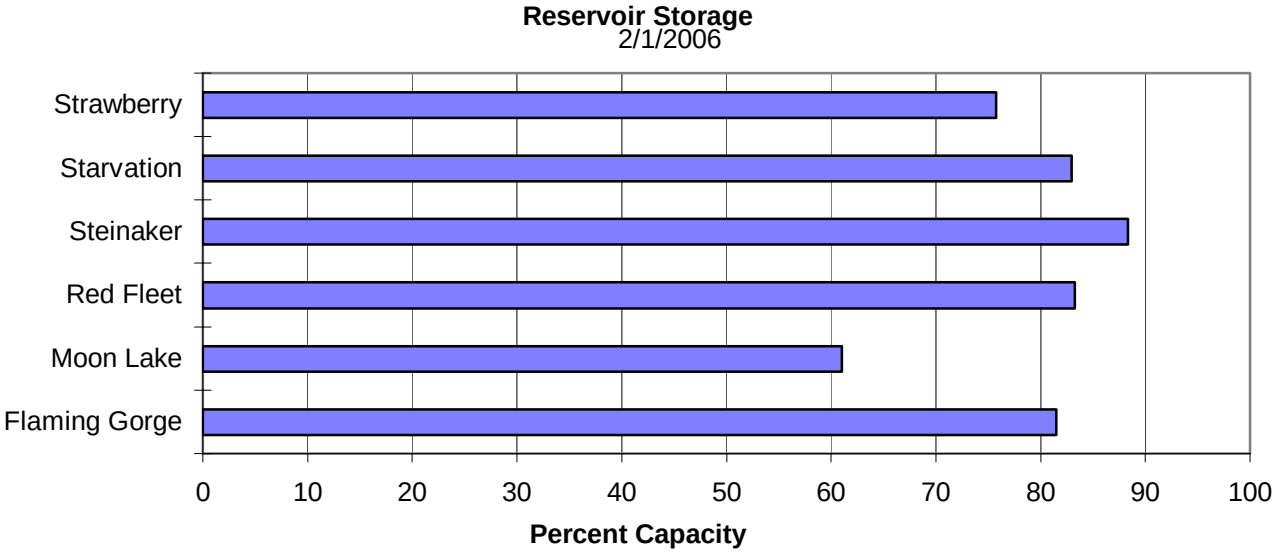
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

Uintah Basin and Dagget SCD's
Feb 1, 2006

Snowpacks across the Uintah Basin and North Slope areas are near average at 112%, which is 60% of last year. The North Slope ranges from 60% to 122% and the Uintah Basin ranges from 89% to 143% of average. Precipitation during January was above average at 114% bringing the seasonal accumulation (Oct-Dec) to 102% of average. Soil moisture values in runoff producing areas are at 33% of saturation in the upper 2 feet of soil compared to 58% last year. Reservoir storage is at 78% of capacity, 10% more than last year. The Surface Water Supply Index for the western area is 79% and for the eastern area it is 46% indicating above normal conditions on the west side and average for the eastern area. Streamflow forecasts range between 75% and 121% of average. General water supply conditions are near to above average.







UINTAH BASIN & DAGGET SCD'S
Streamflow Forecasts - February 1, 2006

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Blacks Fork nr Robertson	APR-JUL	73	91	104	110	118	140	95
EF of Smiths Fork nr Robertson	APR-JUL	21	27	32	110	37	45	29
Flaming Gorge Reservoir Inflow (2)	APR-JUL	848	1122	1330	112	1556	1921	1190
Big Brush Ck abv Red Fleet Resv	APR-JUL	9.9	14.3	17.7	84	22	28	21
Ashley Creek nr Vernal	APR-JUL	22	31	39	75	48	61	52
WF Duchesne River nr Hanna (2)	APR-JUL	19.3	24	28	117	32	38	24
Duchesne R nr Tabiona (2)	APR-JUL	78	99	115	110	132	159	105
Upper Stillwater Resv Inflow	APR-JUL	70	84	94	115	105	122	82
Rock Ck nr Mountain Home (2)	APR-JUL	77	93	105	118	117	137	89
Duchesne R abv Knight Diversion (2)	APR-JUL	152	188	215	114	243	288	188
Strawberry R nr Soldier Springs (2)	APR-JUL	40	57	70	119	84	108	59
Currant Creek Reservoir Inflow (2)	APR-JUL	12.8	22	29	116	37	52	25
Strawberry R nr Duchesne (2)	APR-JUL	77	109	135	112	163	210	121
Lake Fork River Moon Lake Inflow	APR-JUL	53	65	73	107	82	96	68
Yellowstone River nr Altonah	APR-JUL	43	55	64	103	74	89	62
Duchesne R at Myton (2)	APR-JUL	157	244	315	121	394	528	260
Whiterocks near Whiterocks	APR-JUL	29	40	49	88	59	74	56
Duchesne R nr Randlett (2)	APR-JUL	181	286	370	114	465	626	324

UINTAH BASIN & DAGGET SCD'S
Reservoir Storage (1000 AF) - End of January

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
FLAMING GORGE	3749.0	3054.0	2765.0	2966.0
MOON LAKE	49.5	30.2	20.0	27.9
RED FLEET	25.7	21.4	16.5	18.0
STEINAKER	33.4	29.5	17.9	21.6
STARVATION	165.3	137.1	135.9	132.3
STRAWBERRY-ENLARGED	1105.9	837.6	729.1	642.2

UINTAH BASIN & DAGGET SCD'S
Watershed Snowpack Analysis - February 1, 2006

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
UPPER GREEN RIVER in UTAH	6	59	92
ASHLEY CREEK	2	27	64
BLACK'S FORK RIVER	2	109	116
SHEEP CREEK	1	44	61
DUCHESNE RIVER	11	61	119
LAKE FORK-YELLOWSTONE CRE	4	60	122
STRAWBERRY RIVER	4	82	124
UINTAH-WHITEROCKS RIVERS	2	32	92
UINTAH BASIN & DAGGET SCD	17	60	112

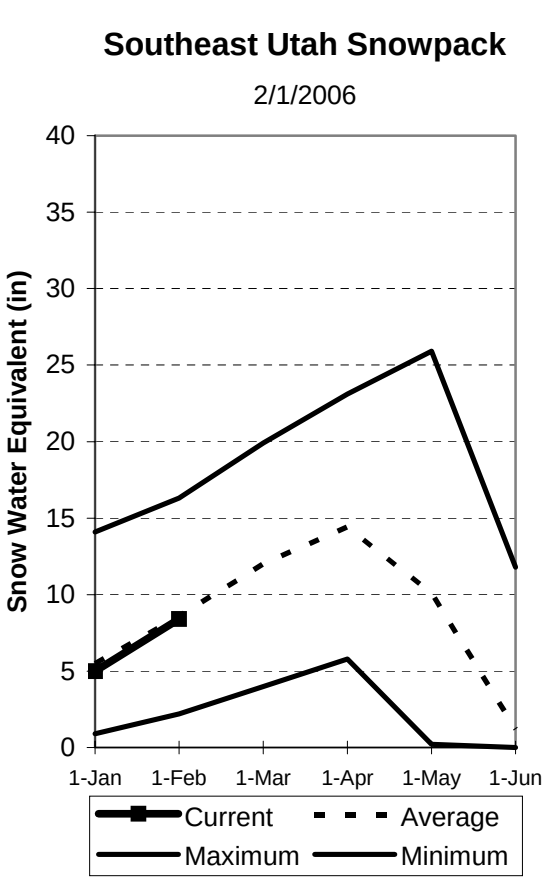
* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

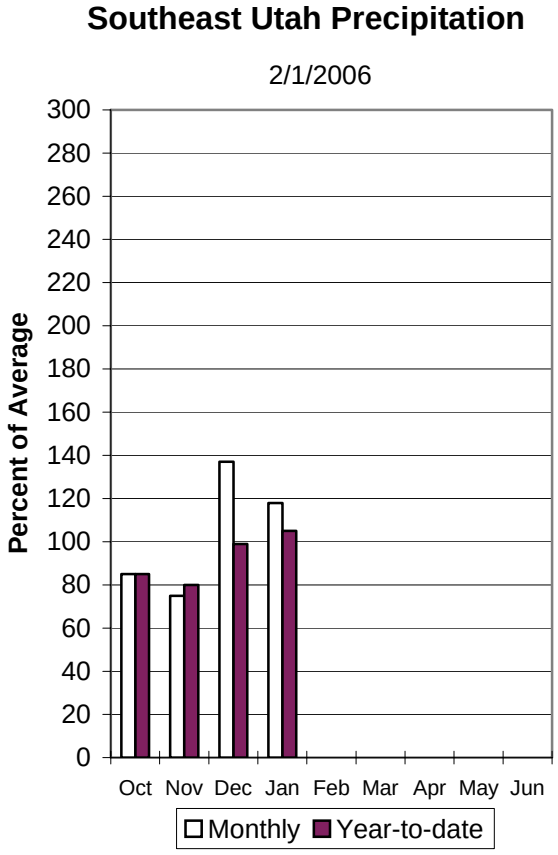
The average is computed for the 1971-2000 base period.

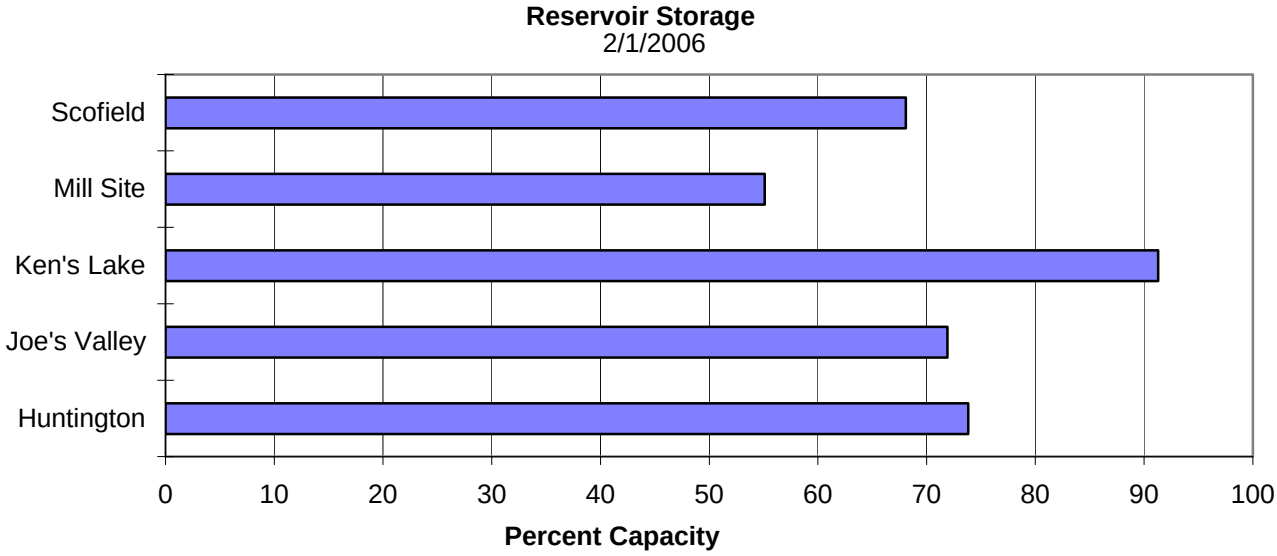
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

Carbon, Emery, Wayne, Grand and San Juan Co.
Feb 1, 2006

Snowpacks in this region are near normal at 97% of average, about 64% of last year. The Abajos and Book Cliffs are much drier at 31% to 39% of normal. Individual sites range from 31% to 130% of average. Precipitation during January was above average at 118%, bringing the seasonal accumulation (Oct-Jan) to 105% of normal. Soil moisture estimates in runoff producing areas are at 34% of saturation in the upper 2 feet of soil compared to 61% last year. Forecast streamflows range from 10% to 120% of average. Reservoir storage is at 69% of capacity, up 34% from last year. Surface Water Supply Indices for the area are: Price 82%, (above normal) San Rafael area 74% (above average) and Moab 48% (near average). General runoff and water supply conditions are near normal.







CARBON, EMERY, WAYNE, GRAND, & SAN JUAN Co.
Streamflow Forecasts - February 1, 2006

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Gooseberry Creek nr Scofield	APR-JUL	8.6	11.3	13.3	112	15.5	19.0	11.9
Price River near Scofield Reservoir	APR-JUL	24	37	46	102	55	68	45
White River blw Tabbyune Creek	APR-JUL	10.1	14.8	18.5	107	23	30	17.3
Green River at Green River, UT (2)	APR-JUL	2420	3240	3800	120	4360	5180	3170
Huntington Ck Inflow to Electric Lk	APR-JUL	8.9	12.9	16.0	102	19.5	25	15.7
Huntington Ck nr Huntington	APR-JUL	27	40	49	98	58	71	50
Joe's Valley Resv Inflow	APR-JUL	41	54	64	110	75	92	58
Ferron Ck (Upper Station) nr Ferron	APR-JUL	30	38	44	113	51	61	39
Colorado River Near Cisco (2)	APR-JUL	2810	4170	5100	110	6030	7390	4650
Mill Creek at Sheley Tunnel nr Moab	APR-JUL	2.1	3.0	3.7	74	4.5	5.9	5.0
Seven Mile Ck nr Fish Lake	APR-JUL	3.3	4.7	5.7	81	6.8	8.7	7.0
Muddy Creek nr Emery	APR-JUL	12.4	16.7	20	101	24	29	19.9
North Ck ab R.S. nr Monticello	MAR-JUL	0.0	0.0	0.1	10	0.1	0.3	0.8
South Ck ab Lloyd's Res nr Monticell	MAR-JUL	0.0	0.1	0.1	10	0.3	0.6	1.4
Recapture Ck Bl Johnson Ck nr Blandi	MAR-JUL	0.0	0.2	0.5	10	1.0	2.1	5.0
San Juan River near Bluff (2)	APR-JUL	345	490	635	52	945	1380	1230

CARBON, EMERY, WAYNE, GRAND, & SAN JUAN Co.
Reservoir Storage (1000 AF) - End of January

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
HUNTINGTON NORTH	4.2	3.1	3.0	2.8
JOE'S VALLEY	61.6	44.3	35.4	41.2
KEN'S LAKE	2.3	2.1	0.4	1.1
MILL SITE	16.7	9.2	4.5	78.8
SCOFIELD	65.8	44.8	8.8	33.8

CARBON, EMERY, WAYNE, GRAND, & SAN JUAN Co.
Watershed Snowpack Analysis - February 1, 2006

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
PRICE RIVER	3	86	113
SAN RAFAEL RIVER	3	103	117
MUDDY CREEK	1	87	130
FREMONT RIVER	3	31	69
LASAL MOUNTAINS	1	72	87
BLUE MOUNTAINS	1	11	31
WILLOW CREEK	1	19	39
CARBON, EMERY, WAYNE, GRA	13	62	97

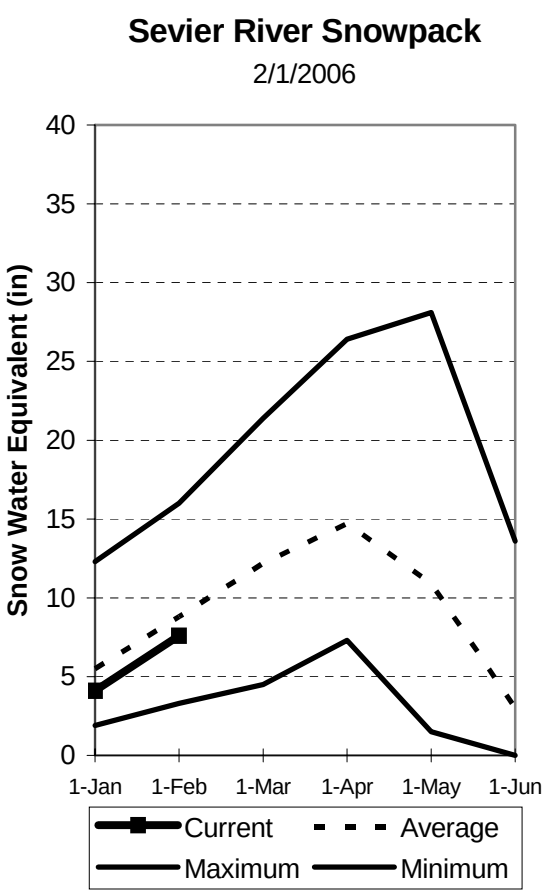
* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

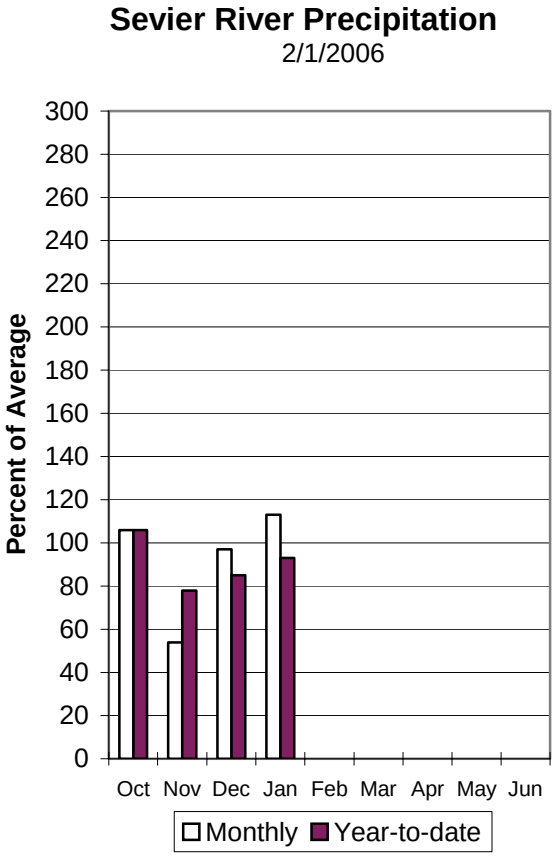
The average is computed for the 1971-2000 base period.

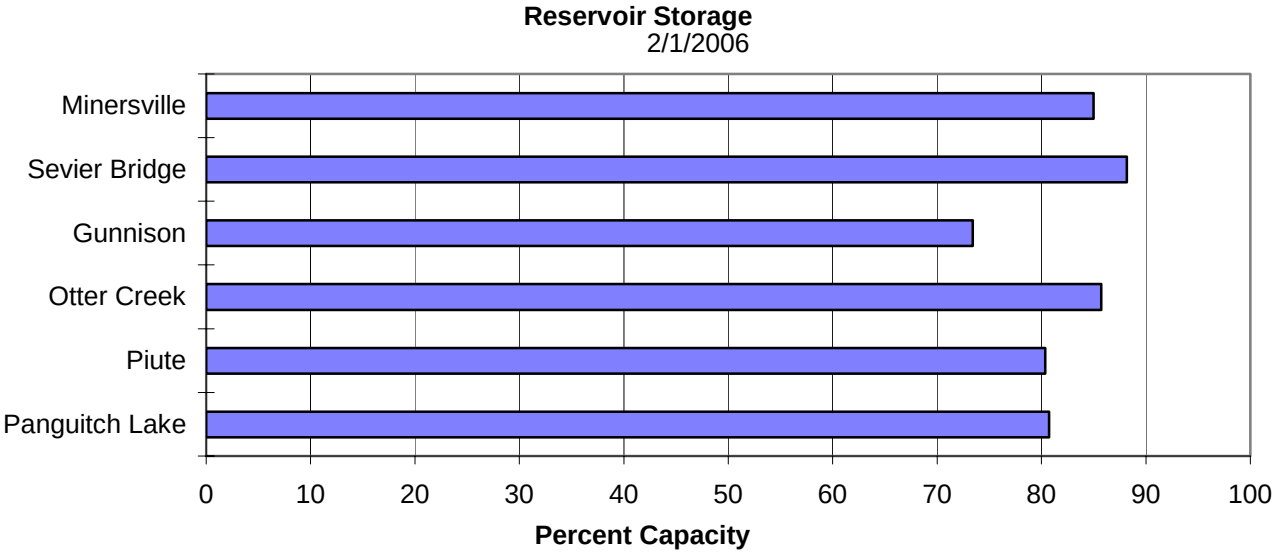
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

Sevier and Beaver River Basins
Feb 1, 2006

Snowpacks on the Sevier River Basin are below normal at 86% of average, about 48% of last year and up 12% relative to last month. Individual sites range from 30% to 120% of average. Precipitation during January was above average at 113% of normal, bringing the seasonal accumulation (Oct-Jan) to 93% of average. Soil moisture estimates in runoff producing areas are at 42% of saturation (Sevier) in the upper 2 feet of soil compared to 66% last year. Streamflow forecasts range from 52% to 104% of average. Reservoir storage is at 85% of capacity, 58% more than last year. Surface Water Supply Indices are: Upper Sevier 46%, Lower Sevier 45% and Beaver 53%. Water supply conditions are near average due to excellent reservoir carryover.







SEVIER & BEAVER RIVER BASINS
Streamflow Forecasts - February 1, 2006

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Sevier River at Hatch	APR-JUL	5.5	23	33	60	43	62	55
Sevier River nr Kingston	APR-JUL	16.0	41	55	62	69	94	89
EF Sevier R nr Kingston	APR-JUL	7.2	22	32	84	42	57	38
Sevier R blw Piute Dam	APR-JUL	13.0	51	77	61	103	141	126
Clear Creek Abv Diversions Nr Sevier	APR-JUL	3.7	12.2	17.0	77	22	30	22
Salina Creek at Salina	APR-JUL	4.5	6.3	11.5	58	21	34	19.7
Manti Ck Blw Dugway Ck Nr Manti	APR-JUL	11.7	15.9	19.1	104	23	28	18.3
Sevier R nr Gunnison	APR-JUL	28	71	145	52	219	360	280
Chicken Creek nr Levan	APR-JUL	1.2	2.3	3.4	76	4.8	7.4	4.5
Oak Creek nr Oak City	APR-JUL	0.7	1.0	1.3	80	1.7	2.2	1.7
Beaver River nr Beaver	APR-JUL	14.1	18.5	22	82	26	32	27
Minersville Reservoir inflow	APR-JUL	2.1	5.5	8.7	52	12.6	19.8	16.6

SEVIER & BEAVER RIVER BASINS
Reservoir Storage (1000 AF) - End of January

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
GUNNISON	20.3	14.9	2.2	13.1
MINERSVILLE (RkyFd)	23.3	19.8	6.7	14.4
OTTER CREEK	52.5	45.0	16.6	36.5
PIUTE	71.8	57.7	30.7	49.5
SEVIER BRIDGE	236.0	208.1	51.1	159.6
PANGUITCH LAKE	22.3	18.0	7.3	131.4

SEVIER & BEAVER RIVER BASINS
Watershed Snowpack Analysis - February 1, 2006

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
UPPER SEVIER RIVER (south	8	26	69
EAST FORK SEVIER RIVER	3	26	68
SOUTH FORK SEVIER RIVER	5	26	69
LOWER SEVIER RIVER (inclu	6	97	105
BEAVER RIVER	2	56	85
SEVIER & BEAVER RIVER BAS	16	47	86

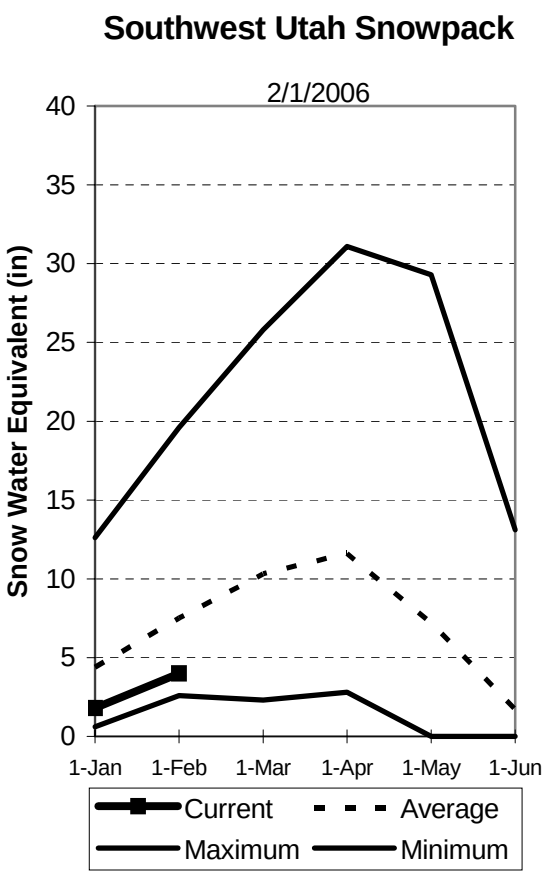
* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

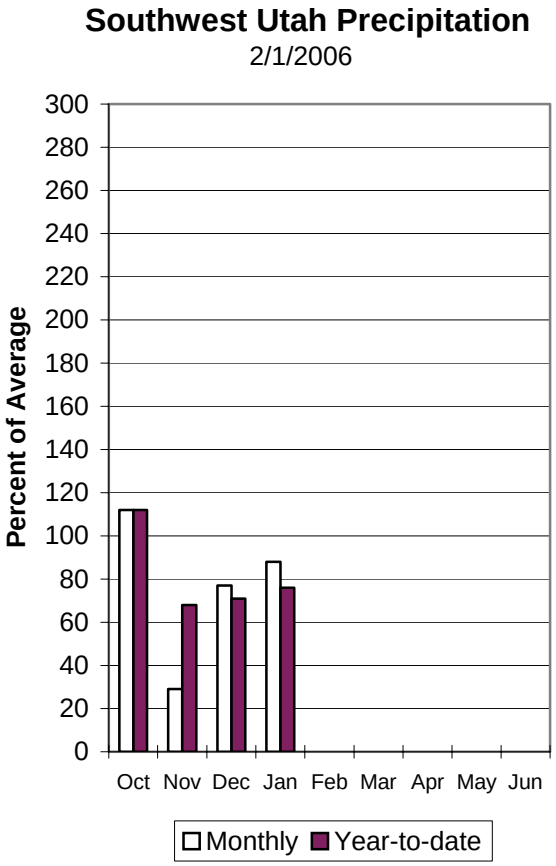
The average is computed for the 1971-2000 base period.

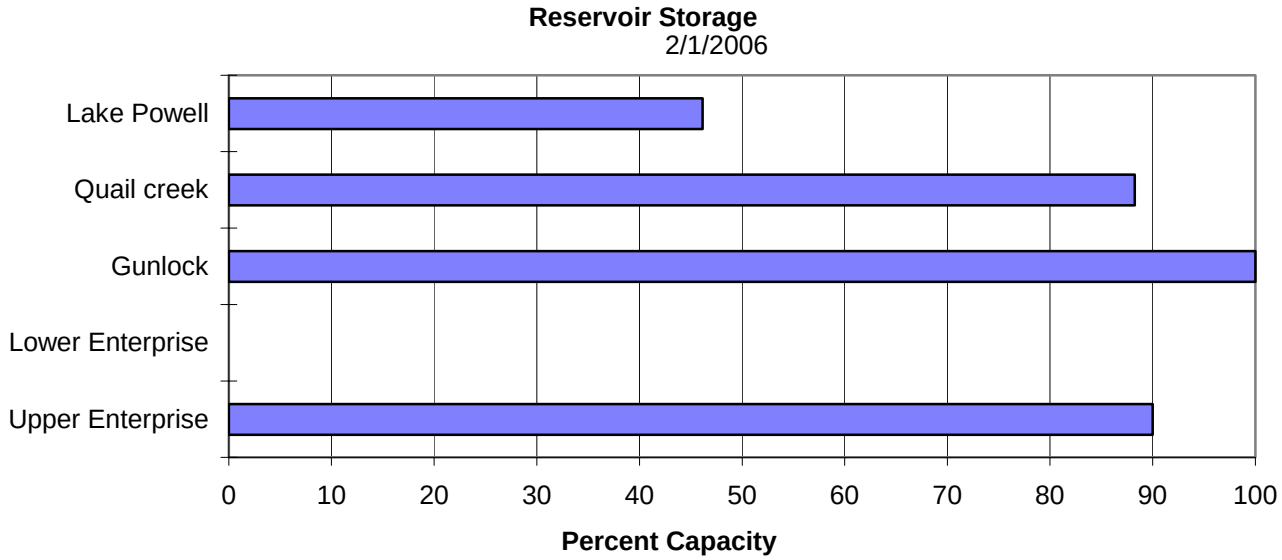
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

E. Garfield, Kane, Washington, & Iron co.
Feb 1, 2006

Snowpacks in this region are much below normal at 54% of average, about 21% of last year. Individual sites range from 0% to 76% of average. Precipitation was below normal during January at 88% of average, bringing the seasonal accumulation (Oct-Jan) to 76% of normal. Soil moisture estimates in runoff producing areas are at 27% of saturation in the upper 2 feet of soil compared to 76% last year. Forecast streamflows range from 36% to 65% of average. Reservoir storage is at 87% of capacity, 2% less than last year. The Surface Water Supply Index is at 52%, indicating near normal water availability.







E. GARFIELD, KANE, WASHINGTON, & IRON Co.
Streamflow Forecasts - February 1, 2006

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>>					30-Yr Avg. (1000AF)
		Chance Of Exceeding *					
		90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	
Lake Powell Inflow (2)	APR-JUL	5160	7030	8300	105	9570	11440	7930
Virgin River at Virgin	APR-JUL	14.7	20	29	45	39	60	64
Virgin River near Hurricane	APR-JUL	13.8	19.3	25	36	38	65	69
Santa Clara River nr Pine Valley	APR-JUL	0.5	1.5	2.5	46	3.7	5.6	5.5
Coal Creek nr Cedar City	APR-JUL	6.2	9.7	12.6	65	15.8	21	19.3

E. GARFIELD, KANE, WASHINGTON, & IRON Co.
Reservoir Storage (1000 AF) - End of January

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
GUNLOCK	10.4	10.4	10.4	5.7
LAKE POWELL	24322.0	11222.0	8492.0	---
QUAIL CREEK	40.0	35.3	32.9	26.5
UPPER ENTERPRISE	10.0	9.0	10.0	---
LOWER ENTERPRISE	2.6	0.0	2.6	38.0

E. GARFIELD, KANE, WASHINGTON, & IRON Co.
Watershed Snowpack Analysis - February 1, 2006

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
VIRGIN RIVER	5	20	60
PAROWAN	2	24	78
ENTERPRISE TO NEW HARMONY	2	26	28
COAL CREEK	2	24	71
ESCALANTE RIVER	2	22	52
E. GARFIELD, KANE, WASHIN	9	22	54

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

UTAH SURFACE WATER SUPPLY INDEX Snow Surveys NRCS USDA Basin or Region SWSI/% Percentile Years with Similar SWSI 1-Feb-06			
Bear River	-2.4	21%	95,02,90,62
Ogden River	2.8	83%	79,81,86,88
Weber River	2.7	83%	74,80,85,95
Provo	3.1	88%	84,86,90,92
West Uintah Basin	2.4	79%	05,01,00,99
East Uintah Basin	-0.3	46%	80.82,96,2000
Price River	2.6	82%	58,68,75,96
San Rafael	2.3	77%	79,97,85,73
Moab	-0.2	48%	96,82,91,94
Upper Sevier River	-0.4	45%	96,71,76,75
Lower Sevier River	-0.4	46%	68,76,89,71
Beaver River	0.3	53%	96,78,74,81
Virgin River	-1.3	35%	04,96,85,97

What is a Surface Water Supply Index?

The Surface Water Supply Index (SWSI) is a predictive indicator of total surface water availability within a watershed for the spring and summer water use seasons. The index is calculated by combining pre-runoff reservoir storage (carryover) with forecasts of spring and summer streamflow which are based on current snowpack and other hydrologic variables. SWSI values are scaled from +4.1 (abundant supply) to -4.1 (extremely dry) with a value of zero (0) indicating media water supply as compared to historical analysis. SWSI's are calculated in this fashion to be consistent with other hydroclimatic indicators such as the Palmer Drought Index and the Precipitation index.

Utah Snow Surveys has also chosen to display the SWSI as a PERCENT CHANCE OF NON-EXCEEDANCE. While this is a very cumbersome name, it has the simplest application. It can be best thought of as a simple scale of 1 to 99 with 1 being the drought of record (driest possible conditions) and 99 being the flood of record (wettest possible conditions) and a value of 50 representing average conditions. This rating scale is a percentile rating as well, for example a SWSI of 75% means that this years water supply is greater than 75% of all historical events and that only 25% of the time has it been exceeded. Conversely a SWSI of 10% means that 90% of historical events have been greater than this one and that only 10% have had less total water supply. This scale is far more intuitive for most people and is totally comparable between basins: a SWSI of 50% means the same relative ranking on watershed A as it does on watershed B, which may not be strictly true of the +4 to -4 scale.

For more information on the SWSI go to: www.ut.nrcs.usda.gov/snow/ on the water supply page. The entire period of historical record for reservoir storage and streamflow is available.

DATA CURRENT AS OF:02/03/06 08:35:03

S N O W C O U R S E D A T A

FEBRUARY 2006

SNOW COURSE	ELEV.	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
AGUA CANYON SNOTEL	8900	2/01	16	3.5	15.9	5.4
ALTA CENTRAL	8800	2/01	111	34.8	32.5	24.7
BEAVER DAMS SNOTEL	8000	2/01	36	8.4	5.7	7.0
BEAVER DIVIDE SNOTEL	8280	2/01	45	11.3	8.8	7.8
BEN LOMOND PK SNOTEL	8000	2/01	99	30.6	33.5	25.0
BEN LOMOND TR SNOTEL	6000	2/01	63	18.3	14.2	14.4
BEVAN'S CABIN	6450				-	-
BIG FLAT SNOTEL	10290	2/01	44	9.9	17.8	11.4
BIRCH CROSSING	8100				-	4.6
BLACK FLAT-U.M. CK S	9400	2/01	30	6.1	8.2	5.9
BLACK'S FORK GS-EF	9340				-	5.8
BLACK'S FORK JUNCTN	8930				-	5.9
BOX CREEK SNOTEL	9800	2/01	34	7.5	14.5	8.0
BRIAN HEAD	10000				-	11.8
BRIGHTON SNOTEL	8750	2/01	69	21.3	23.3	15.9
BRIGHTON CABIN	8700	2/01	80	23.3	28.5	17.5
BROWN DUCK SNOTEL	10600	2/01	58	14.0	25.4	11.1
BRYCE CANYON	8000				10.2	3.6
BUCK FLAT SNOTEL	9800	2/01	54	14.3	12.3	11.3
BUCK PASTURE	9700				-	-
BUCKBOARD FLAT	9000	1/30	19	3.6	-	-
BUG LAKE SNOTEL	7950	2/01	64	18.0	14.5	13.2
BURT'S-MILLER RANCH	7900				-	3.8
CAMP JACKSON SNOTEL	8600	2/01	16	2.8	24.4	9.0
CASCADE MOUNTAIN SNO	7770	2/01	52	14.0	13.5	-
CASTLE VALLEY SNOTEL	9580	2/01	31	6.4	21.1	7.7
CHALK CK #1 SNOTEL	9100	2/01	70	19.6	19.0	15.3
CHALK CK #2 SNOTEL	8200	2/01	46	10.3	12.3	9.9
CHALK CREEK #3	7500				-	5.6
CHEPETA SNOTEL	10300	2/01	34	7.8	24.8	8.3
CLAYTON SPRINGS SNTL	10000	2/01	26	4.7	17.9	-
CLEAR CK RIDG #1 SNT	9200	2/01	54	14.8	17.1	12.3
CLEAR CK RIDG #2 SNT	8000	2/01	43	8.4	10.1	9.4
CORRAL	8200				-	-
CURRANT CREEK SNOTEL	8000	2/01	40	9.4	9.9	6.8
DANIELS-STRAWBERRY S	8000	2/01	52	15.9	14.8	11.1
DILL'S CAMP SNOTEL	9200	2/01	45	10.9	12.6	8.4
DONKEY RESERVOIR SNO	9800	2/01	18	3.5	9.5	5.1
DRY BREAD POND SNTL	8350	2/01	63	16.9	15.5	14.5
DRY FORK SNOTEL	7160	2/01	43	10.4	7.0	10.1
EAST WILLOW CREEK SN	8250	2/01	12	1.9	10.2	4.9
FARMINGTON U. SNOTEL	8000	2/01	94	31.4	31.8	20.3
FARMINGTON LOWER SC	6950				-	16.2
FARMINGTON L. SNOTEL	6780	2/01	64	17.7	15.1	-
FARNSWORTH LK SNOTEL	9600	2/01	45	9.8	14.7	11.4
FISH LAKE	8700				-	5.1
FIVE POINTS LAKE SNO	10920	2/01	50	12.6	20.9	9.8
G.B.R.C. HEADQUARTER	8700				-	-
G.B.R.C. MEADOWS	10000				-	14.5
GARDEN CITY SUMMIT	7600				-	11.1
GARDNER PEAK SNOTEL	8350	2/01	18	4.2	15.9	-
GEORGE CREEK	8840				-	-
GOOSEBERRY R.S.	8400				-	7.5
GOOSEBERRY R.S. SNTL	7900	2/01	28	6.5	6.2	5.8
GUTZ PEAK SNOTEL	6820	2/01	4	1.5	15.1	-
HARDSCRABBLE SNOTEL	7250	2/01	66	19.6	14.3	10.9
HARRIS FLAT SNOTEL	7700	2/01	5	1.4	13.2	4.7
HAYDEN FORK SNOTEL	9100	2/01	56	14.8	13.0	9.8
HENRY'S FORK	10000				-	-
HEWINTA SNOTEL	9500	2/01	37	7.9	6.3	6.7
HICKERSON PARK SNTL	9100	2/01	20	2.7	6.1	4.4
HIDDEN SPRINGS	5500	1/31	23	5.9	1.2	5.5
HOBBLE CREEK SUMMIT	7420				-	9.6
HOLE-IN-ROCK SNOTEL	9150	2/01	26	5.0	5.3	4.1
HORSE RIDGE SNOTEL	8260	2/01	69	21.5	16.3	15.1
HUNTINGTON-HORSESHOE	9800				-	15.1
INDIAN CANYON SNOTEL	9100	2/01	28	6.2	16.9	6.9
JOHNSON VALLEY	8850				-	4.6

SNOW COURSE	ELEV.	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
JONES CORRAL G.S.	9720				-	-
KILFOIL CREEK	7300				-	9.4
KILLYON CANYON	6300	2/01	32	9.0	2.9	11.5
KIMBERLY MINE SNOTEL	9300	2/01	31	7.4	12.3	9.4
KING'S CABIN SNOTEL	8730	2/01	23	4.1	14.7	6.8
KLONDIKE NARROWS	7400				-	12.7
KOLOB SNOTEL	9250	2/01	34	6.7	37.0	12.1
LAKEFORK #1 SNOTEL	10100	2/01	36	7.1	17.6	7.9
LAKEFORK BASIN SNTL	10900	2/01	63	15.6	18.0	11.7
LAKEFORK MOUNTAIN #3	8400				-	4.6
LAMBS CANYON	7400	1/31	54	15.0	12.5	11.2
LASAL MOUNTAIN LOWER	8800	1/31	22	4.0	6.8	5.9
LASAL MOUNTAIN SNTL	9850	2/01	23	6.8	9.5	7.8
LIGHTNING RIDGE SNTL	8220	2/01	-	16.3	12.9	-
LILY LAKE SNOTEL	9050	2/01	46	10.4	10.6	8.2
LITTLE BEAR LOWER	6000				-	7.1
LITTLE BEAR SNOTEL	6550	2/01	38	11.4	10.1	9.1
LITTLE GRASSY SNOTEL	6100	2/01	0	.0	1.7	4.9
LONG FLAT SNOTEL	8000	2/01	12	2.9	9.3	5.6
LONG VALLEY JCT. SNT	7500	2/01	8	2.1	9.4	4.4
LOOKOUT PEAK SNOTEL	8200	2/01	89	25.0	20.4	15.4
LOST CREEK RESERVOIR	6130				-	3.8
LOUIS MEADOW SNOTEL	6700	2/01	58	18.2	11.3	-
MAMMOTH-COTTONWD SNT	8800	2/01	54	14.5	13.8	12.9
MERCHANT VALLEY SNTL	8750	2/01	33	6.7	11.6	8.2
MIDDLE CANYON	7000				-	9.1
MIDWAY VALLEY SNOTEL	9800	2/01	44	10.5	49.1	13.9
MILL CREEK	6950	1/31	55	14.5	11.7	12.5
MILL-D NORTH SNOTEL	8960	2/01	72	22.6	22.2	15.8
MILL-D SOUTH FORK	7400	2/01	65	19.8	13.4	13.0
MINING FORK SNOTEL	8000	2/01	54	13.8	17.5	9.3
MONTE CRISTO SNOTEL	8960	2/01	80	23.2	21.0	18.2
MOSBY MTN. SNOTEL	9500	2/01	32	6.2	19.0	7.0
MT.BALDY R.S.	9500				-	14.9
MUD CREEK #2	8600				-	8.6
OAK CREEK	7760				-	-
PANGUITCH LAKE R.S.	8200				-	-
PARLEY'S CANYON SNTL	7500	2/01	51	14.0	10.2	11.6
PARRISH CREEK SNOTEL	7740	2/01	69	19.3	15.9	-
PAYSON R.S. SNOTEL	8050	2/01	45	11.9	11.1	11.6
PICKLE KEG SNOTEL	9600	2/01	45	12.5	9.3	10.0
PINE CREEK SNOTEL	8800	2/01	50	11.0	14.7	12.9
RED PINE RIDGE SNTL	9200	2/01	53	12.5	11.3	10.5
REDDEN MINE LOWER	8500				-	10.8
REES'S FLAT	7300				-	8.7
ROCK CREEK SNOTEL	7900	2/01	32	7.7	10.1	5.6
ROCKY BN-SETTLEMT SN	8900	2/01	53	14.4	19.9	15.1
SEELEY CREEK SNOTEL	10000	2/01	32	9.1	11.4	8.8
SMITH MOREHOUSE SNTL	7600	2/01	44	11.1	11.3	9.2
SNOWBIRD SNOTEL	9700	2/01	107	33.9	41.2	20.1
SPIRIT LAKE	10300				-	7.4
SQUAW SPRINGS	9300				-	4.6
STEEL CREEK PARK SNO	10100	2/01	46	10.7	10.7	9.4
STILLWATER CAMP	8550				-	6.5
STRAWBERRY DIVIDE SN	8400	2/01	52	14.1	14.1	11.9
SUSC RANCH	8200				-	5.2
TALL POLES	8800				-	8.4
TEMPLE FORK SNOTEL	7410	2/01	63	16.5	13.7	-
THAYNES CANYON SNTL	9200	2/01	68	19.5	28.1	13.8
THISTLE FLAT	8500				-	-
TIMBERLINE	9100				-	-
TIMPANOGOS DIVIDE SN	8140	2/01	70	18.6	25.2	15.0
TONY GROVE LK SNOTEL	8400	2/01	119	38.7	27.9	23.4
TONY GROVE R.S.	6250				-	9.0
TRIAL LAKE	9960				-	14.7
TRIAL LAKE SNOTEL	9960	2/01	76	21.6	21.5	15.7
TROUT CREEK SNOTEL	9400	2/01	22	4.0	15.4	5.8
UPPER JOES VALLEY	8900				-	6.8
VERNON CREEK SNOTEL	7500	2/01	31	5.7	7.2	7.1
VIPONT	7670				-	-
WEBSTER FLAT SNOTEL	9200	2/01	28	6.3	21.4	9.8
WHITE RIVER #1 SNTL	8550	2/01	42	8.5	13.3	8.3
WHITE RIVER #3	7400				-	5.8
WIDTSOE #3 SNOTEL	9500	2/01	20	2.9	22.0	7.1
WRIGLEY CREEK	9000				-	6.7
YANKEE RESERVOIR	8700				-	5.6

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Utah Water Supply Outlook Report

Natural Resources Conservation Service
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